

(No Model.)

C. EISENHARDT.

HANDLE FOR CROSSCUT SAWS.

No. 395,218.

Patented Dec. 25, 1888.

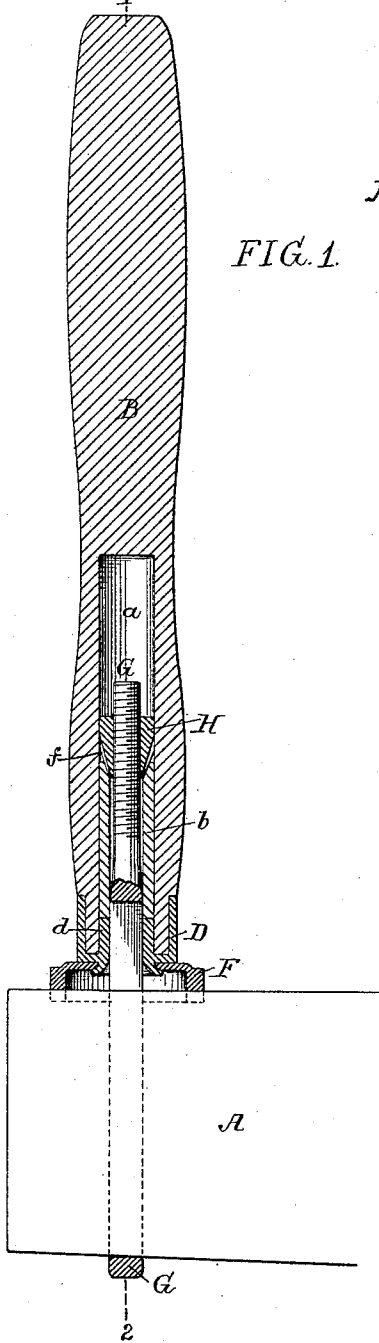


FIG. 1.

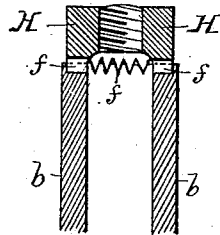


FIG. 4.

FIG. 2.

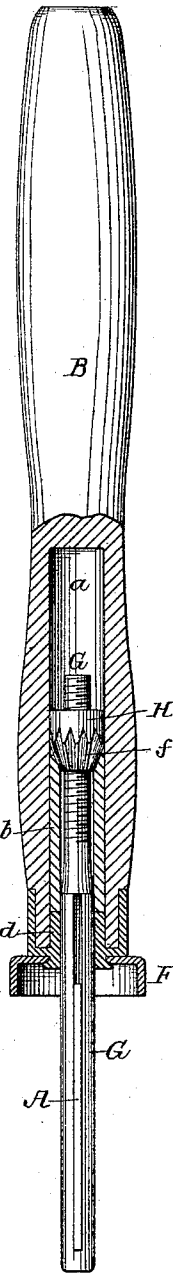
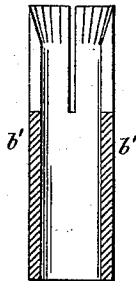


FIG. 3.



Witnesses:
Albert Popkine
Jas. L. Skidmore.

Inventor:
Christopher Eisenhardt
by his Attorneys
Houison & Houison

UNITED STATES PATENT OFFICE.

CHRISTOPHER EISENHARDT, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR
TO HENRY DISSTON & SONS, INCORPORATED, OF PENNSYLVANIA.

HANDLE FOR CROSSCUT-SAWS.

SPECIFICATION forming part of Letters Patent No. 395,218, dated December 25, 1888.

Application filed August 25, 1888. Serial No. 283,741. (No model.)

To all whom it may concern:

Be it known that I, CHRISTOPHER EISENHARDT, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have
5 invented certain Improvements in Handles for Crosscut-Saws, of which the following is a specification.

The object of my invention is to provide a simple and inexpensive but secure form of clip whereby a crosscut-saw handle may be
10 secured to the end of the blade of the saw, and this object I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

15 Figure 1 is a view, partly in section and partly in elevation, showing part of the end of the blade of a crosscut-saw, the handle therefor, and a clip constructed in accordance with my invention. Fig. 2 is a view,
20 partly in elevation and partly in section, on the line 1 2, Fig. 1; and Figs. 3 and 4 are views illustrating modifications of the invention.

A represents part of the end of the blade
25 of a crosscut-saw, and B the handle to be secured thereto, this handle having at the lower end a ferrule, D, to which is swiveled a ring, F, notched for the reception of the upper edge of the blade of the saw, as usual.

30 The lower end of the handle B has a cylindrical bore, *a*, into which is fitted snugly a sleeve, *b*, preferably of some tough wood, this sleeve resting at its lower end upon a tubular flange, *d*, forming part of the ferrule D
35 and entering the lower end of the bore *a*. Up through this tubular flange and through the sleeve *b* passes the clip-rod G, the lower end of which is slotted for the reception of the blade of the saw, the upper end of the
40 rod being threaded for adaptation to a nut, H, which is in the form of an inverted cone, the conical portion being provided with sharp-edged ribs or teeth *f*, as shown in Fig. 2.

The conical nut H bears upon the upper
45 end of the sleeve *b*, and, owing to its sharp-edged ribs or projections, is prevented from turning independently of said sleeve, which in turn fits so snugly in the bore *a* of the

handle B that when the latter is turned the sleeve will be turned with it, thus rotating
50 the nut and causing the rise or fall of the clip-rod G, depending upon the direction in which the handle is rotated.

In securing the handle to the blade the rod is drawn up easily until the upper edge of
55 the saw seats itself in the notches of the swivel-ring F, whereupon further rotation of the nut H will cause the same to be drawn downward in the handle, and the conical face of the nut will thus expand the upper
60 portion of the sleeve B forcibly against the sides of the bore *a* in the handle, so that the harder the pull upon the blade the more intimate will be the frictional contact between the sleeve *b* and the handle and the less the
65 liability of the handle to slip upon said sleeve when it is turned.

Although, as before remarked, I prefer in carrying out my invention to use a wooden sleeve, *b*, a metal sleeve, *b'*, split at the upper
70 end, as shown, for instance, in Fig. 3, so that it can be expanded into the bore *a* of the handle when acted upon by the conical nut H, may be used in place of the wooden sleeve, if desired, or where there is a very snug fit of
75 the sleeve in the bore of the handle the conical-expansion feature may be omitted, the nut in this case having on its under side teeth for engaging with the top of the sleeve. (See
80 Fig. 4.)

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. The combination of the bored handle, the sleeve fitted snugly therein, the threaded clip-rod, and a nut adapted to said rod and
85 toothed for engagement with the upper portion of the sleeve, whereby said nut and sleeve are compelled to turn together, all substantially as specified.

2. The combination of the bored handle, 90 the sleeve fitted snugly therein, the threaded clip-rod, and the nut engaging with the upper end of the sleeve and having a conical portion for expanding the same against the sides of the bore when the nut is subjected 95 to strain, all substantially as specified.

3. The combination of the bored handle,
the sleeve fitted snugly in said bore, the
threaded clip-rod, and the nut adapted thereto
and having a conical portion with sharp-
5 edged ribs or teeth for engaging with the up-
per portion of the sleeve, all substantially as
specified.

In testimony whereof I have signed my name
to this specification in the presence of two sub-
scribing witnesses.

CHRISTOPHER EISENHARDT.

Witnesses:

EDWARD M. RILEY.

HARRY SMITH.